Audit of the Government of British Columbia's Enforcement of the Forest Practices Code in the Vernon Forest District

FPB/ARE/02

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Report from the Board

Report from the Board

I. Introduction and Scope

Three ministries have primary enforcement authority under the *Forest Practices Code of British Columbia Act* (the Code)—Forests (MOF); Water, Land and Air Protection (MWLAP); and Energy and Mines (MEM). The Forest Practices Board is required to carry out periodic independent audits of the appropriateness of government enforcement under Part 6 of the Code.

The Board audited government's Code enforcement infrastructure and processes in December 1999 in *An Audit of the Government of British Columbia's Framework for Enforcement of the Forest Practices Code* (IPA). This audit set out to provide the public and the three ministers with an independent, objective assessment of government's framework for Code enforcement and to establish a solid foundation for developing the Board's enforcement audits. In June 2000, the Board developed the initial criteria against which the appropriateness of government's enforcement of the Code would be assessed, contained in the document *Enforcement Audit Program, Outline of Technical Approach*. Public and government agency input was solicited in the preparation of this material.

The Vernon Forest District was randomly selected in 2000 for the first pilot audit, the objective being to assess the appropriateness of government's enforcement of the Code in that district. All three Code ministries were included in the scope of the audit. The Ministry of Water, Land and Air Protection was called the Ministry of Environment, Lands and Parks at the time of the audit. The Ministry of Energy and Mines had no Code-related enforcement activities to assess during the audit period.

The Board has determined that government's compliance and enforcement activities are both subject to audit. Compliance activities primarily include planning, conducting and reporting inspections of Code practices. Enforcement activities include investigations and determinations. The field portion of the audit was carried out in September 2000 and included interviews of compliance and enforcement staff, supervisors and managers, as well as field and office reviews of inspections, investigations and determinations. Compliance and enforcement activities related to timber harvesting; construction, maintenance and deactivation of roads; silviculture; range; and fire protection undertaken between September 1, 1999 and September 30, 2000 were audited.

As a pilot audit of government's enforcement of the Code, the audit was also intended to test the Board's new enforcement audit criteria and methodology on a variety of district forest enforcement practices. Knowledge gained from this audit will be incorporated into the Board's program of periodic audits of government's enforcement of the Code. In addition, since this audit is the first one to build on the findings of the IPA, it provides a means of evaluating the status of government's response to several of the IPA recommendations.

II. Overall Conclusion

The Board examined the auditor's report (attached) and received representations from the Ministry of Forests in preparing this report.

The Board upholds the audit within the mandate of a full scope pilot designed to assess the appropriateness of government's enforcement of the Code. The audit has also evaluated government's performance against the established audit criteria.

The Board recognizes the public's valid expectation of an effective government compliance and enforcement (C&E) program, one that ensures that forest practices meet Code requirements and initiates appropriate enforcement action where Code requirements are not met. It also recognizes that government's mandate for C&E is broader than the Code, and thus, MOF and MWLAP management must make challenging decisions on allocation of resources to address their full range of responsibilities. Similarly, MOF district staff responsible for the C&E functions must attend to a wide range of responsibilities when conducting their work. Thus, it is important that the C&E function is undertaken in a well-planned and well-ordered manner to ensure effectiveness and the efficient use of scarce resources.

Overall the Board concludes the following for the period September 1, 1999 to September 30, 2000:

Ministry of Forests

- The key objective of the district's compliance and enforcement program, to promote compliance with the Code, was appropriate.
- Although the district completed an adequate number of inspections, the inspection practices did not provide sufficient assurance that non-compliances were detected and addressed. The district also did not document non-compliance information sufficiently to enable trend analysis of substandard practices as a means to promote ongoing improvement. Consequently, improvement was not achieved in some field practices where improvement was needed.
- Management and supervision did not monitor and measure performance of C&E activities sufficiently to ensure C&E was conducted effectively.
- The district Small Business Forest Enterprise Program (SBFEP) did not have sufficient controls in place to ensure that compliance monitoring was objective.
- Where initiated, district investigation and determination activities were well conducted and demonstrated appropriate enforcement of the Code.

In addition, the Board concludes that the new MOF compliance procedures—which are partially developed and were not in use in the district during the audit period—may contribute significantly to improvements in district inspection, planning and documentation when fully implemented.

Ministry of Water, Land and Air Protection

District MWLAP staff were substantially removed from Code compliance inspection activities and relied almost entirely on MOF staff to ensure water, fish and wildlife values were adequately protected. Provided that MOF inspections address these values, this arrangement is an efficient use of government resources.

III. Summary of Audit Findings

Overall, government staff in the Vernon district are appropriately enforcing many aspects of the Code.

Ministry of Forests

Inspections of field activities:

During the audit period, a sufficient number of MOF inspections of harvesting practices were carried out. However, inspections were not planned well enough to provide assurance that sufficient higher risk activities were inspected, nor were some inspections conducted well enough to ensure that several deficiencies in forest practices of licensees, observed during the audit, were identified. As a result, these deficient practices were not documented or addressed with appropriate compliance or enforcement action. By failing to identify and address these deficiencies, the district missed opportunities to foster an overall learning environment to achieve continuous improvement of practices. This has also resulted in inadequate management of the risk of future environmental impact. The Board notes that the auditors observed no significant environmental impacts during the audit as a result of the forest practices carried out in the district.

Investigations and determinations:

There were 44 case files with investigations during the audit period. The auditors examined 12 of them in detail. Investigations were conducted thoroughly and were well researched and documented. District manager determinations of non-compliance with the Code followed established ministry procedures, were reasoned and well documented and were generally conducted in a timely manner. Determinations were also found to be fair and equitable. Overall, the Board considers that these functions were well conducted.

Small Business Forest Enterprise Program compliance and enforcement:

In the Vernon district SBFEP, it is usually the same field person who supervises contract activities and conducts compliance monitoring. These challenging responsibilities reflect a conflict of interest, both perceived and actual, since staff are responsible for inspecting Code compliance for those practices that they also supervise. In the IPA, the Board reported this as an inherent weakness, where the district manager is both responsible for delivering and

enforcing the Code in the SBFEP. The Board recognizes that this conflict is a consequence of government legislation and not an organizational model chosen by the MOF. Nonetheless, the results of this audit indicate that the district has not established adequate controls to provide assurance that compliance inspections of SBFEP activities are conducted with a sufficient level of objectivity. Also, the ministry has not provided guidance to the district on proper management controls to address the conflict.

Compliance and enforcement for silviculture, range and woodlot programs:

Compliance inspections for the silviculture, range and woodlot programs are also generally conducted by the program staff involved in the activities, with C&E staff becoming involved in investigations. The audit results support that such arrangements may be appropriate, provided that sufficient controls are in place to ensure that the duties are conducted with an appropriate level of objectivity.

Management direction:

MOF executive and headquarters staff are responsible for designing and providing districts with appropriate tools to effectively conduct C&E activities. The Board recommended in the IPA that adequate and consistent guidance be given to district managers to meet enforcement objectives. It also recommended completion of the Code enforcement framework, including establishment of clear objectives, measures to monitor and assess performance of C&E and improved reporting of C&E to the public. The audit found that, for the most part, these features were not yet in place in the district's C&E program.

Vernon district management showed good support to the C&E function by assigning adequate staffing levels. Further, district management adopted an audit approach to objectively evaluate major licensee and SBFEP performance on a few sites. This approach enabled management to examine licensee performance to meet Code requirements but did not evaluate staff C&E performance directly. Management did not monitor and measure performance of C&E activities sufficiently to ensure C&E was conducted effectively in the Vernon district. Reporting systems were limited to numbers of inspections undertaken and number of contraventions documented. This did not help management evaluate C&E staff performance, such as ensuring that key resource features and non-compliances were properly identified and assessed by field staff.

The Board recognizes the extensive work that has taken place within MOF to refine compliance procedures. Once fully implemented, they are expected to improve the planning and documentation of compliance inspections as well as improve reporting to assist evaluation of C&E effectiveness. The Board looks forward to audit results that demonstrate the success of the procedures in meeting these objectives.

Ministry of Water, Land and Air Protection

In the Vernon district, the Ministry of Water, Land and Air Protection's compliance and enforcement of the Code is primarily at the operational planning stage and does not include a compliance monitoring role. MWLAP staff rely on MOF staff to identify potential non-compliances that affect water, fish and wildlife values for which MWLAP has direct responsibility. The success of this arrangement depends heavily on the inspection skills of MOF staff to detect and pursue potential non-compliances. When inspections fail to identify or record deficient practices, these values are put at increased risk. The IPA recommended that government's enforcement framework be strengthened to ensure that all non-timber forest resources be addressed. The results of this audit suggest that this may not yet be fully in place in the Vernon district.

When potential non-compliances relating to water, fish and wildlife values are investigated, MWLAP staff are appropriately consulted.

The IPA also recommended that the Code agencies work towards a cooperative field level approach to make efficient use of resources. Although the arrangement in the Vernon district demonstrates an efficient use of government resources, it may not be addressing potential risks to certain forest values.

General

The Board's criteria for appropriate enforcement of the Code were tested in this pilot. Further work is required to evaluate them in the context of knowledge gained through the audit process conducted in the Vernon district. The criteria have generally stood up well as a set of principles against which to measure the appropriateness of government's enforcement, and will be further refined and incorporated into the Board's enforcement audit program now under development. The Board intends that its enforcement audit program will be subject to agency and public review during its continued development.

IV. Recommendations

The Board is aware of the potential for changes to the present model through which government enforces the Code. Some of the factors that may influence it are:

- a likely shift towards more results-based Code legislation;
- the results of the government's core services review, which is designed to identify and confirm the government's core roles and responsibilities and ensure government is modern, relevant and affordable;
- a potential reduction in resources available to conduct government's C&E activities.

With these considerations in mind, the Board emphasizes that its recommendations may require implementation in a different manner than can be foreseen at present to ensure that their objectives are achieved. Accordingly, as provided by section 185 of the Act, the Board makes the following recommendations:

1. The Ministry of Forests should continue to develop, refine and implement the remaining components of the provincial compliance and enforcement framework as a means of achieving key C&E objectives, in particular:

    - The reporting component of the compliance procedures, to enable district staff to analyze trends in licensee practices to promote continuous improvement and enable district management to achieve more effective monitoring and control of C&E activities.
    - Appropriate C&E models for the range, silviculture, and woodlot programs, which would enable flexible approaches to complement the unique nature of each program and at the same time provide for sufficient independence in compliance and enforcement activities.

2. To address the inherent conflict in the district SBFEP compliance and enforcement program, the Ministry of Forests should:

    - At headquarters, establish an appropriate and consistent means of managing the conflict, as previously recommended in the IPA, and ensure these means are adopted in districts.
    - In the Vernon district, establish improved internal controls to increase the level of independence of compliance inspections for SBFEP activities.

3. The Vernon district should implement improvements in C&E inspections through:

    - Improved planning of inspections to ensure they focus on key site risk features.
    - Provision of focused compliance inspection training for staff to improve the quality of inspections.
    - Improved monitoring and assessing of the performance of C&E functions to ensure C&E is conducted effectively.

In accordance with section 186 of the Act, the Board requests that the Vernon Forest District and the Deputy Minister of Forests advise the Board by January 31, 2003 of the actions taken to address these recommendations.

4. In keeping with IPA recommendations that ministries work cooperatively and government ensure that non-timber resources are addressed, the district MOF and MWLAP staff should develop a joint strategy to ensure that C&E activities fully consider and address water, fish and wildlife resources.

In accordance with section 186 of the Act, the Board requests that the Vernon Forest District and the Southern Interior Region of the Ministry of Water, Land and Air Protection advise the Board by January 31, 2003, of the actions taken to address this recommendation.

W.N. (Bill) Cafferata, RPF
Chair, Forest Practices Board

November 13, 2001

Report from the Auditor

Report from the Auditor

1.0 Introduction

Section 176(b) of the *Forest Practices Code of British Columbia Act* (the Code) requires the Forest Practices Board (the Board) to carry out periodic independent audits of the appropriateness of government enforcement under the Code. Three ministries have authority under the Code for enforcement—the ministries of Forests (MOF), Environment, Lands and Parks (MELP)[1] and Energy and Mines (MEM).

In 1999, the Board conducted and publicly reported an audit of government's enforcement framework for the Code.[2] In 2000, the Board initiated the development of its program of periodic audits of government enforcement by preparing and seeking input from a broad public on the Board's criteria for assessing the appropriateness of government's enforcement of the Code.[3]

As part of the Board's 2000 audit program, the Vernon Forest District was selected for the conduct of a pilot audit of government enforcement, addressing the activities of the three government agencies in the area. The Vernon Forest District was selected randomly from a population of nine forest districts that met certain technical prerequisites for the conduct of a pilot audit, such as having a full spectrum of forest activities subject to enforcement, including range.

The Vernon Forest District covers approximately 850,000 hectares in the Okanagan Timber Supply Area. There are three large licensees and a number of smaller licensees operating under major forest tenures, the Small Business Forest Enterprise Program (small business), which includes a small-scale salvage program and the Vernon Log Yard, approximately 80 range tenures and 25 woodlots.

The Allowable Annual Cut (AAC) in the district is approximately 1.25 million cubic metres. The timber is harvested using a mix of conventional and non-conventional harvesting systems. The district has a diverse distribution of biological, geological and climatic conditions. Conditions range from dry-belt to wet-belt and from rolling hills and plateaus to steep mountains. The operating areas in the district have a mix of Douglas fir, lodgepole pine, spruce and mixed cedar/hemlock forests.

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1 From July 2001, the Ministry of Water, Land and Air Protection has MELP's Code responsibilities.

2 *An Audit of the Government of British Columbia's Framework for Enforcement of the Forest Practices Code, December 1999.*

3 *Enforcement Audit Program, Outline of Technical Approach, June 2000.*

2.0 Scope and Approach

The audit examined government's planning and field activities related to enforcement of the Code for timber harvesting; road construction, maintenance and deactivation; fire protection; silviculture and range activities; for the period September 1, 1999 to September 30, 2000. This involved examining government's compliance and enforcement (C&E) activities, as well as the forest and range practices carried out by licensees during the audit period, which were subject to government C&E activities.

The audit was performed using criteria developed to assess three broad aspects of government enforcement: the design of the C&E organization and business processes, their application in practice through sampling both compliance and enforcement 'transactions' in a number of forestry areas, and the management framework used to direct, support, monitor and report on C&E activity.

Audit criteria

In assessing the appropriateness of government's enforcement of the Code, the following main assessment criteria were applied:

- Government agencies obtain, use and maintain adequate information on the forest activities subject to compliance and enforcement.
- Government agencies have an effective way of identifying risks associated with forest activities and utilizing risk in inspection planning.
- Government agencies conduct a sufficient number of inspections, in a fair, objective and effective way, and accurately record and report results.
- Investigations and determinations are carried out in all applicable situations and only when warranted. They are performed in a fair, objective and consistent way, and are accurately recorded and reported.
- Agencies establish, through operational plan approval and related processes, expectations for forest practices which are enforceable and in accordance with the Code.
- There are established organizational structures, policies and processes that contribute to and support appropriate enforcement of the Code.
- The decisions and actions of different parts of government responsible for enforcement of the Code are appropriate and coordinated.
- Reporting systems provide adequate information on agency performance in relation to enforcement objectives.

Candidate activities

The activities carried out during the audit period, and therefore subject to audit, were:

Forest and range activities subject to compliance and enforcement:

- harvesting of 249 cutblocks by major licensees
- harvesting of 40 cutblocks and approximately 100 small-scale salvage operations by small business licensees and operators
- construction of 66 sections of forest road by major licensees and 17 by the small business program
- road maintenance and deactivation activities of major licensees
- fire protection tools and infrastructure for all forest practices carried out during the audit period
- silviculture activities of major licensees and small business (including site preparation and planting) and silviculture obligations (free growing blocks and regeneration delay blocks)
- harvesting and road activity on 16 woodlots
- cattle management activities on 83 range tenures

Government compliance and enforcement activities:

- the design of the compliance and enforcement organization and business processes
- the planning, conduct, recording and reporting of compliance and enforcement activity related to harvesting, roads, silviculture, woodlots, fire protection and range
- the systems and processes used to manage C&E activity

The majority of C&E activities were performed by the MOF Vernon Forest District (the district). During the audit period, the district conducted over 400 inspections of the forest practices of major licensees, and over 600 inspections of the forest practices of small business licensees and operators, including about 400 in small-scale salvage.

MELP's approach to Code C&E does not involve a program of compliance inspections of forest activities. Considerable reliance is placed on MOF. We examined the appropriateness of this arrangement in relation to MELP's responsibilities for water, fish and wildlife values.

The audit did not assess C&E activity by the Ministry of Energy and Mines because no mining activity involving timber removal was carried out in the area of the Vernon Forest District during the audit period.

Audit work and activities examined

The audit work included extensive interviewing of agency staff, reviewing and evaluating policies, processes and controls both within and between the ministries, office-based procedures on a wide selection of agency C&E inspections, and field examination of selected roads, cutblocks and range tenures on the ground and from the air using helicopters.

Field examination was conducted on the following areas:

- harvesting of 41 cutblocks by major licensees
- harvesting of 15 cutblocks by small business operators
- construction of 10 road sections and deactivation of one road section
- five woodlot operations
- site preparation on one cutblock
- fire protection tools
- ranching operations under five range tenures

3.0 Overall Conclusions

The audit examined the compliance and enforcement organization and activities of the agencies with Code enforcement responsibilities in the Vernon area for the period September 1, 1999 to September 30, 2000.

Ministry of Forests

The district, overall, is appropriately enforcing many aspects of the Code and, in our view, has set an appropriate objective for its compliance and enforcement program; to promote compliance with the Code. However, there remain a number of significant weaknesses that require improvement in order to appropriately enforce the Code.

MOF has not yet completed its framework for Code compliance and enforcement, and some aspects of the district's business activities are still being performed in traditional ways. Gaps include an updated risk assessment methodology for inspection planning, guidance on the organization and approaches to be taken to ensure a level of independence in C&E in the silviculture, woodlot and range programs, and procedural guidance on the conduct and documentation of inspections. In addition, training has focused more on enforcement than compliance matters and there has been insufficient direction provided to inspectors on conducting inspections and assessing compliance.

Forest officials are too often either not recognizing non-compliance, or when non-compliance is recognized, treating it as minor and not as a contravention of the Code. These deficiencies reflect a weakness in the calibration of non-compliance by the Ministry of Forests. It is our view that the focus of district inspections is predominantly on assessing whether there are any substantial adverse impacts caused by the forest practices being inspected. Where there are deficiencies or non-compliance without substantial environmental impacts, the inspectors generally determine that practices are not in contravention of the Code. In our view, this is not appropriate enforcement of the Code. While the audit did not identify clear examples of significant environmental impacts, the district's C&E activity in the audit period did not adequately address the risk of future environmental impact or sufficiently address practices requiring improvement.

The district does not recognize the inherent conflict of interest in enforcing the small business activities for which it is also responsible for performing, and sufficient compensating controls have not been applied. While the forest management standards achieved in the small business program may be equivalent to those achieved by major licensees, the C&E approaches are quite different. It is not appropriate for small business inspectors to perform C&E for activities for which they have supervisory responsibilities.

The district identified small business and small-scale salvage as high risk activities and applied resources to these areas. However, it did not effectively identify and use risk information in its inspection planning related to the harvesting and road activity of major licensees. In practice, moderate risk blocks received as many inspections as those considered high risk, and two large areas of land, both under major tenures to one licensee, received no inspections for a period of several months. Overall, the district is performing a sufficient number of inspections to provide adequate coverage of harvesting and road construction activity and a sense of prevailing risk. However, with better planning, it could obtain more focused risk coverage by performing fewer inspections more effectively. Some improvement is also required in the inspection coverage of site preparation, road deactivation and range activities.

The audit identified serious concerns with the information available to and used by managers and supervisors of the district's compliance and enforcement program. Program management did not seek or use the type of information that would be required to adequately monitor and measure performance. Management reports are limited to the number of inspections performed and the number of contraventions recorded. There is little information respecting other aspects of appropriate enforcement, such as the timeliness or completeness of inspections, inspection coverage by risk category, or the rate of non-compliance by type, operator or risk category.

The Ministry of Forests has recognized some of the weaknesses described in this report and, prior to the period of our audit, was developing updated procedures that include a revised risk assessment methodology, improved inspection planning procedures and a requirement to record all contraventions, irrespective of the magnitude of environmental impact or whether formal enforcement action is warranted. In our opinion, the new standards are necessary to appropriately enforce the Code.

In addition to the overall coverage of harvesting and road construction activity achieved, three areas of district performance are worthy of note.

A strength of district operations was the introduction of the *Okanagan Timber Harvesting Guidelines* several years prior to the Code. Parties in the Okanagan TSA developed and agreed to timber harvesting guidelines that set standards and expectations for many of the forest resources which were intended to be addressed by higher level plans. This has played a significant role in the forest management standards achieved in the area, and contributed to the conduct of compliance and enforcement activity.

We found that the district generally receives and utilizes sufficient information about forest practices to properly plan inspections, despite such information not being required under the Code. Improvement is required in the information received for site preparation, road deactivation and road maintenance activities.

Finally, those investigations and determinations conducted by the district were warranted; performed in a fair, objective and reasonable way; were accurately recorded and reported; and generally completed within a reasonable time period.

Ministry of Environment, Lands and Parks

Roles and responsibilities for Code enforcement were agreed to and documented by MOF and MELP. MOF takes the lead for Code investigative matters, and MELP's conservation officers address other matters (water, fish and wildlife) under other legislation. For those investigations conducted, we observed that MELP was consulted by MOF. The defined roles and interaction between MOF and MELP related to investigations is efficient and working adequately.

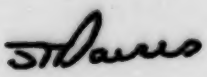
MELP's involvement in compliance matters is through the forest ecosystem specialist (FES) at the operational planning stage. There is no MELP post-harvest inspection program, and post harvest field presence is limited to occasional joint inspections at the request of MOF.

Under these approaches, MELP senior officials are not attempting to use their authorities under the Code, and the ministry has substantially removed itself from Code enforcement. While this approach does not appear to be that intended by legislation, it is more efficient and is workable provided that MOF inspections are addressing MELP's needs.

While we observed that there was adequate referral by MOF of identified non-compliance to MELP officials, reporting to the forest ecosystem specialist of the results of MOF inspection activities is limited to occasional informal discussion. As a result, while the FES provides input into operational plans, the FES does not receive sufficient information about the appropriateness of operational plans and whether forest practices are in compliance with the plans. With respect to fish and wildlife habitat, this represents a serious gap in MELP's responsibilities.

Ministry of Energy and Mines

The audit did not assess enforcement activity by the Ministry of Energy and Mines because no mining activity involving timber removal was carried out in the area during the audit period.



Jon Davies
Auditor of Record
August 14, 2001

4.0 Findings and Conclusions

The detailed findings and conclusions of the audit are set out in this section by assessment criteria.

4.1 Criterion: Government agencies obtain, use and maintain adequate information on the forest activities subject to enforcement.

In order to undertake compliance and enforcement activities with any assurance as to whether the right activities are being examined, the ministries must be informed of the forest activities taking place in the district. If the agencies do not know about all activities happening in the field, there is little chance that the activities will be inspected, and there is an increased chance that non-compliance with the Code will not be identified and addressed.

It should be noted that the Code does not require licensees to notify government of the commencement of forest practices. Timber harvesting and silviculture activities are reported annually upon completion. The absence of a legislated notification requirement has the potential to severely restrict government's ability to inspect forest practices.

The audit assessed whether government has systems in place whereby it obtains, uses and maintains sufficient information about forest practices to enable an effective program of periodic inspections.

Ministry of Forests

With the few exceptions discussed below, the district achieved this criterion. The district utilizes a notification system under which major licensees operating in the district notify staff of the commencement of harvesting and road construction activities, prior to their commencement. Notifications of the commencement of harvesting and road construction activities were received from licensees in almost all cases, enabling the district to plan and conduct inspections of these activities on a timely basis.

For small business forest activities, the district's administration of the program provides a working knowledge of the timing of activities on the ground. The district therefore was informed of, and used, information on small business operations to plan inspections of active operations, without the need for a formal notification system.

For range activities, range use plans establish locations and timeframes for grazing and other operational requirements, and so the district is informed of the planned activities.

For regeneration delay and free to grow obligations, the silviculture reporting system provides for complete information.

We identified two activities for which the district does not receive sufficient information. No information is received about road deactivation or silviculture site preparation activities.

For road deactivation, the district is not always aware of activities at or near the time that they are being carried out. Except for Forest Renewal BC deactivation projects,[4] there is no system in place whereby forest officials are notified of activities taking place, and district inspections of in-block deactivation activities generally take place during final harvest inspections conducted after deactivation is complete, up to several years later. The district informed us that there is a limited amount of permanent deactivation in high risk areas in the district.

For silviculture site preparation activities, the district is not aware of activities taking place, and does not carry out inspections at or near the time of the activity. Some site preparation activities receive informal inspections at the time that regeneration status is inspected some years later. Site preparation activities have generally been viewed as the highest risk to the environment of silviculture activities.

Finally, for road maintenance, the Code requires holders of road permits to carry out periodic maintenance, including their own program of inspections, to ensure roads are maintained to standards set out in the Code. An activity notification system is therefore not required, and the district utilizes a systems approach, in which the focus of C&E is on ensuring that licensee systems are in place and operating effectively, rather than inspecting the results of road maintenance activities. However, the district was not able to demonstrate that it has fully implemented its systems for enforcing road maintenance. There was no verification of licensees' systems of inspections, and district inspections of road condition were often not documented.

We also considered the way information is maintained for use in inspection planning. We found that district information systems are not adequately supporting the information needs of forest officials in planning inspections. Current systems, including the Forest Tenure Administration System and the ledgers maintained by forest officials, do not maintain information about forest practices in a form that allows reasonable reference and update. They do not identify key features and items requiring follow-up are not adequately tracked. We identified a number of items where a requirement for follow-up was indicated on inspection reports but no follow-up inspection was carried out.

Ministry of Environment, Lands & Parks

MELP does not receive information about the timing of forest activities conducted by licensees or MOF, and does not have a program of periodic inspections of such activities. MELP's role in enforcing the Code is focused primarily on providing input into operational plans prior to plan approval by the MOF district manager.

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[4] Under a services agreement, MOF conducts inspections of Forest Renewal BC funded deactivation and provides assurance that work has been performed to acceptable standards.

Conclusions

The district generally receives and utilizes sufficient information about harvesting, road construction and range activities, and, in silviculture, for regeneration delay and free to grow obligations.

The district does not receive sufficient information about road deactivation and silviculture site preparation activities.

For road maintenance, the district's system involving reliance on licensee inspections is incomplete. No information is received to verify that licensees are meeting their obligations under the Code.

MOF systems for maintaining information on licensee activity and inspections performed do not adequately support inspection planning.

MELP does not receive notification from operators about the timing of their forest activities.

The Ministry of Forests plans to provide, in a system being built to support its new compliance procedures, a tool for inspection planning that includes follow-up action.

4.2 Criterion: Government agencies have an effective way of identifying risks associated with forest activities and utilizing risk in inspection planning.

Once government agencies have determined the activities eligible for inspection, they need an effective method of determining where to place their inspection efforts. Because they cannot inspect all forest activities conducted by all parties, they need a way to allocate their resources to minimize the risk that impacts to the environment are not detected.

The audit assessed whether government has an effective process for identifying risk and uses information on risk to target inspection efforts on higher risk activities and phases of operations. The audit also addressed the adequacy of the inspection approach and coverage planned.

Ministry of Forests

We examined this criterion from the perspectives of both the district-level program management and the detailed site-specific inspection planning.

At the program management level, there was no district business plan in place setting out program risks, available resources and planned activities. In the absence of such a plan, the district was unable to substantiate and justify its allocation of resources based on program risks. Within the C&E program, the district had prepared a monitoring plan. However, the information was quite limited. The plan simply identified an estimated total number of inspections and set targets for the level of inspections to be carried out. In practice, the district

had identified small business and small-scale salvage as high risk activities, and allocated resources to these areas.

For detailed inspection planning, although MOF has an established risk assessment process and risk assessments associated with harvesting and road construction activities were documented, the risk assessment process is pre-Code, does not include all forest practices and prescribed inspection levels cannot be achieved with the resources available. In practice, the prescribed inspection levels were not used. Inspectors used their judgement in the number, selection and timing of inspections performed.

In addition to these system weaknesses, we identified gaps in areas and activities inspected. Site preparation and road deactivation activities were not sufficiently inspected, and two large areas of land, both under major tenures to one licensee, received no inspections for a period of several months, despite high risk activities taking place during these periods. The district has stated that these large gaps in inspection coverage following staffing issues were conscious risk management decisions, based in part on performance information and an experiment with a 'results-based Code'. In our view, there were better options available, including a reduced inspection presence, particularly one specifically designed to assist in assessment of performance under a results-based Code regime.

Our field examination of three cutblocks in the uninspected areas identified one cutblock with excessive soil disturbance, caused by the licensee operating in unfavourable conditions.

Finally, we observed a number of blocks rated as high or very high risk that were either not inspected or not inspected on a timely basis, compared to some moderate risk blocks that were inspected several times. Overall, harvesting activities considered by the district as moderate risk received as many or more inspections than activities considered high risk, without sufficient justification for the increased inspection levels.

As a result of these deficiencies, the district is generally unable to demonstrate that risk is adequately driving inspection activity.

Despite these weaknesses, the district is performing sufficient inspections to provide adequate coverage of harvesting and road construction activity and a sense of prevailing risk. The district inspects approximately 70 percent of activities prior to completion of all obligations and 100 percent of final obligations. With better planning, it could obtain more focused risk coverage, resulting in fewer inspections conducted more effectively.

Small Business, Silviculture & Range

For small business activities, staff do not use the same risk assessment process as for major licensees. Risk is addressed through their regular project management presence.

For silviculture, except for site preparation, the inspection approaches are adequate considering the associated levels of risk. Approximately five percent of regeneration delay

blocks are randomly selected for inspection. For free-growing declarations, all surveys are reviewed and approximately 50 percent are field inspected.

There were very few inspections of site preparation activities during the period of our audit. The district has begun to review site preparation activities as part of the regeneration delay inspections. We are concerned with this approach because random selection will not focus on high risk site preparation activities. Also, inspection at regeneration appears too late to address any site preparation contraventions, and is not consistent with MOF's objective of promoting compliance.

The range program does not formally use risk assessment in its inspection planning. Its C&E approach utilizes a combination of audits, monitoring of prior issues and response to public complaints. There is a cycle of permit and range use plan renewals that governs the audit selections. About 20 percent of operations are reviewed each year, through audits and follow-up activity. The planning and compliance monitoring approach appears adequate except that there is no inspection activity beyond the audits and complaint responses, and a large area of range tenures was left without inspections.

Ministry of Environment, Lands & Parks

MELP does not perform a program of inspections of forest activities and, therefore, does not utilize a risk assessment process. Inspections are periodically conducted on sites of interest, usually at the request of MOF.

Conclusions

MOF does not have an effective method of identifying and utilizing risks associated with forest activities to direct inspection efforts to higher risk activities, both within and between forest activities.

Although the district identified small business and small-scale salvage as high risk activities and applied resources to these areas, it did not effectively identify and use risk information in its inspection planning related to the harvesting and road activities of major licensees.

The district is performing sufficient inspections to provide adequate coverage of harvesting and road construction activity and a sense of prevailing risk. With better planning, it could obtain more focused risk coverage more effectively.

There are insufficient inspections of site preparation and road deactivation.

The range approach to compliance and enforcement leaves some large areas without inspection coverage, and needs to be supplemented with random inspections of areas not under audit.

The Ministry of Forests has recognized some of the above weaknesses and, prior to the period of our audit, was developing updated policy and processes.

4.3 Criterion: Government agencies conduct a sufficient number of inspections, in a fair, objective and effective way, and accurately record and report results.

The effective conduct of inspections enables government to assess the results of forest practices, identify potential contraventions of the Code and initiate enforcement actions. Weaknesses in inspections reduce government's ability to appropriately enforce the Code.

The audit assessed whether government's inspections covered a reasonable proportion of each type of activity, each party engaged in forest practices, each significant resource feature (fish streams, terrain etc.) and each geographic area. We also assessed whether the number of inspections conducted was sufficient and whether the inspections were properly planned and performed.

Ministry of Forests

As discussed in the preceding section, the audit identified some gaps in the district's program of inspections relating to site preparation, range, road deactivation and two large geographic areas. The audit also identified several issues with the planning and conduct of inspections completed by the district.

Inspection Planning

The audit assessed whether staff responsible for the conduct of inspections fully prepare for each inspection. We found that district officials do not prepare inspection plans prior to conducting inspections. Although forest officials take operational plans and prior inspection reports with them during inspections, it is not apparent what level of review takes place, and forest officials indicated that ad hoc inspections are often also conducted in areas near to planned inspections.

The benefit of site-specific inspection plans is the assurance that specific features or forest resources requiring inspection are examined. They also enable district supervisors to ensure that inspections are being performed effectively. The district is concerned that such plans are too time-consuming. In our view, plans can be brief and only become detailed if warranted by multiple block features. Conducting a few well-planned and effective inspections is preferable to a larger number of less organized inspections. The ministry's new compliance manual provides guidance on planning and conducting inspections. Its guidance on making site specific inspection decisions, including the recommended timing and method of inspection as well as where on site to focus, appears to be consistent with our view.

Conclusion

District forest officials are not adequately preparing for inspections. Specific resource features or locations of interest, and the method and level of inspection required, are not identified prior to the conduct of inspections.

Inspection Conduct

The audit assessed whether inspections conducted by forest officials accurately and completely portray the ground conditions and the results of the forest practices inspected (i.e. inspectors observe and recognize any potential Code contraventions). The audit also assessed whether inspections address the main risks in each activity examined.

Of 37 major licensee cutblocks inspected by forest officials, 21 had issues or potential contraventions of the Code that needed to be addressed. The audit identified the following:

In nine cases, the issues were quite minor and appropriate actions were taken.

In six cases, the practice and result was observed, but it was not recognized as potential non-compliance by the inspector, resulting in no action being taken.

In five cases, the practice and result was observed and recognized as non-compliance, but it was not treated as non-compliance by the inspector, or the action taken did not appropriately address the contravention.

In one instance, the potential non-compliance was not identified because the inspector did not inspect the area where the potential non-compliance occurred.

The six blocks examined where the practice and result had been observed by the inspecting forest official, but were not recognized as potential non-compliance, are:

- In one instance, a forest official failed to recognize that a culvert was undersized and in contravention of the approved operational plan, because at the time of the inspection the culvert was functioning adequately.
- In two instances, a licensee failed to retain the prescribed number of wildlife trees and did not implement prescribed measures to protect adjacent trees from wind. In three inspections of these blocks, the inspection reports did not identify the issues, but indicated that wildlife trees and cutblock boundaries were in compliance.
- In one block adjacent to a lake, a forest official observed approximately 21 trees harvested outside an approved cutblock boundary, but did not mention the trees in his inspection report.
- In one case, a licensee piled slash and knocked over some trees in a wildlife tree patch, but the inspector did not feel that any significant harm had occurred and therefore did not feel that a potential contravention had occurred.
- In one case, a steep bladed trail adjacent to an S4 stream had not been waterbarred. The inspection report indicated that the trails were in compliance.

In the five blocks examined where the audit identified potential contraventions of the Code that had been observed by the inspecting forest official and recognized as contraventions of the Code, the forest officials generally offered the licensee advice as to what actions were necessary

to rectify the contravention, and either did not record the contravention at all, or indicated that practices were in compliance with the Code.

- In three situations, licensees had not completed their obligations under the Code to dispose of debris and/or rehabilitate and grass seed disturbed areas, sometimes several years after the obligations were required to have been complete. In these cases, forest officials advised the licensees to complete their obligations (in one of these cases, advice was provided on more than one occasion) and in one case granted a formal extension for the completion of the obligations, despite not having the authority to do so.
- In one case, a road failure caused by excessive water on the road surface resulted in debris flowing 40 metres downhill. However, no formal investigation was conducted as to the cause of the failure because the forest official determined that no environmental damage had occurred and the rehabilitation measures taken by the licensee were adequate.
- In one case, approximately four years after completion of harvest, the forest official observed a road with five culverts missing and erosion occurring, but no potential contravention was recorded and no action was taken. Subsequent to the audit, the district indicated that the road was scheduled for deactivation in spring 2001 and so no action was necessary.

In our examination of woodlots, we found that all five woodlots inspected by forest officials had issues or potential contraventions of the Code. In four of these cases, the issues were generally quite minor and appropriate actions were taken. In one case involving an access road in steep terrain, we observed substantial maintenance deficiencies that the district did not consider to be non-compliance with the Code, because no observable environmental impact had occurred.

District management emphasized to the auditors that, in their view, forest officials properly addressed these potential minor non-compliance issues. We do not concur with the district. We examined 41 major licensee cutblocks, 37 of which had been inspected by forest officials, and five woodlot cutblocks, all of which has been inspected. Of the 26 of these blocks where we observed potential non-compliance, in 13 cases the non-compliance was either missed or not treated as non-compliance. While it is not clear that any of the 13 items are individually significant, many of them are clearly not minor in nature, and the frequency of our observations is of concern.

We recognize that forest officials must apply discretion in their enforcement of the many potential non-compliances with legislation and plans that can arise in forest operations. In our testing of compliance and enforcement for major licensees, small business and woodlots, we have accepted a number of observed actions or decisions by forest officials as appropriate on the basis of the non-compliance being minor. However, in contrast, most of the items described in the preceding paragraphs were indicative of deficient practices and warranted either further compliance and enforcement action or attention as an issue for further examination in the licensees' operations.

These results reflect that MOF has not yet sufficiently calibrated non-compliance (i.e. defined standards for compliance) with the Code. It is our view that the focus of district inspections is predominantly on assessing whether there are any substantial adverse impacts[5] caused by the forest practices being inspected. Where there are deficiencies or non-compliance without substantial environmental impacts, the inspectors generally determine that practices are not in contravention of the Code. In our view, this is not appropriate enforcement of the Code.

The absence of consideration of potential contraventions that do not have substantial environmental impacts does not adequately address the risk of future environmental impacts. For example, in the case of the undersized culvert noted above, at the time of the audit inspection, the culvert was not fully functioning and was beginning to allow sediment to be introduced into the stream that it was intended to protect. By not recognizing and addressing the non-compliance at the time that the inspector observed the undersized culvert, the risk of future environmental impact was not addressed or reduced through appropriate enforcement action. Furthermore, by accepting an undersized culvert as compliant because it was functioning adequately, the forest official reinforced to the licensee that it need not adhere to approved operational plans as long as no significant harm occurs.

The district's view of calibration has been influenced by corporate direction. In 1997, it was recognized that recording every minor contravention in the Enforcement Action, Administration, Review and Appeal Tracking System (ERA), which may be open to public review, would be unduly critical of industry performance. Direction was provided not to record minor instances of non-compliance in ERA. To qualify as minor, non-compliance had to be either minor in nature and easily rectified, or temporarily out of compliance in the normal phase of operations. In our view, the district's interpretation of minor is not consistent with this guidance, and is not appropriate. The ministry's *Compliance Manual May, 2001* supports our view – "Most contraventions are not linked to actual damage, but to an unacceptable increase in risk of damage to values on site."

As a result, the district's approach to inspection results does not sufficiently influence or contribute to reducing the underlying rate of non-compliance. In our examination of forest activities in the Vernon Forest District, with one possible exception, we found no examples of significant environmental impact. It is less clear whether this good result is attributable to the district's C&E activity. As described above, our findings include a number of examples of non-compliance that were clearly not minor in nature, and the district's approach did not address these situations adequately. There was no improvement where improvement is clearly required.

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[5] The term substantial adverse or environmental impact is used here to distinguish it from significant environmental impact. Significant non-compliance or impact are terms used in the Board's compliance audits, which reflect a degree of non-compliance or impact which warrants public reporting, and is not necessarily an appropriate threshold for C&E decision-making.

Conclusions

There are deficiencies in the conduct of inspections. Forest officials are too often either not recognizing non-compliance or, when non-compliance is recognized, treating it as minor and not as a contravention of the Code. These deficiencies reflect a weakness in MOF's calibration of non-compliance.

The district's C&E activity in the audit period did not adequately address the risk of future environmental impact and does not sufficiently influence the underlying rate of non-compliance. We found a number of examples of non-compliance that were clearly not minor in nature, and the district's approach resulted in there being no improvement where improvement is clearly required.

The Ministry of Forests has recognized some of the above weaknesses and, prior to the period of our audit, was developing updated procedures that include recording all contraventions, irrespective of the magnitude of environmental impact or whether formal enforcement action is warranted. In our opinion, the new standards are necessary to appropriately enforce the Code.

Small Business Forest Enterprise Program

Through the small business program, the district manager is responsible for forest development planning and the administration of timber sale licences (TSLs). The district manager also has specific responsibilities and obligations for forest practices in the program, including silvicultural activities (generally in the case where timber is harvested by a licensee under the authority of a TSL), and/or a full spectrum of forest planning and practices, including timber harvesting and road construction (generally in the case where timber is harvested by parties under a 'harvest and haul' contract to the district manager).

In these situations, the district manager and staff working on behalf of the district manager are accountable for the success of small business forest practices. This puts district small business inspectors in a conflict of interest, as the staff that are inspecting forest activities are also responsible for overseeing the implementation of the activities. We therefore examined the processes and procedures that the district has in place to compensate for this inherent conflict of interest.

With respect to TSL holders, district management determined that the C&E function would conduct inspections on some small business forest activities. In our view, this is only a partial solution to the inherent conflict, and would not adequately address the issue. Furthermore, independent inspectors from the C&E function did not perform any inspections of small business activities as intended.

With respect to harvesting activities carried out under contract to the district manager, the Kamloops Forest Region (the region) had implemented a procedure whereby any potential non-compliance relating to district manager obligations was to be investigated by a designated district C&E leader. Depending on the significance of the non-compliance, the C&E leader

would be expected to file a report and retain it at the district, or file a report to the region, which may choose to further investigate the non-compliance. This procedure does not adequately address the inherent conflict. Furthermore, the C&E leader investigated no instances of potential non-compliance and no reports were prepared. The district stated that during the audit period no contraventions by the district manager were identified by the district or region. Therefore, there was no need to involve the region in any investigations.

Our audit did not identify any instances of significant environmental harm by small business operators. However, the audit did identify a number of potential contraventions of the Code that, in our view, warranted consideration by someone other than the forest official who was also responsible for implementation of the activities. For example, in one case, an operator under a harvest and haul contract to the district manager constructed a bladed trail in the reserve zone of an S3 stream. In this case, upon learning of the unauthorized harvesting activity, the forest official filed an amendment to the approved silviculture prescription that in effect eliminated the need for the reserve zone. The district C&E leader was not informed of the unauthorized harvesting until the audit team questioned this case.

In another example, an operator under a site preparation contract constructed a fire guard substantially larger than authorized, adjacent to a stream. In this case, the forest official did not formally document the potential for a contravention of the Code, but did note that the fire guard should be assessed for damage to the environment and probable rehabilitation. In responding to the audit findings, the district stated that the fireguard had been rehabilitated and that the issue of compliance with the Code had not yet been considered.

In our view, the audit results demonstrate that the district has not adequately addressed the inherent conflict of interest in the small business program. It is not appropriate for small business inspectors to conduct C&E for activities for which they have supervisory responsibilities. We identified a number of situations in which the focus of small business inspections was on supervision rather than assessing compliance with the Code.

While the forest management standards achieved in the small business program may be equivalent to those achieved by major licensees, the C&E approaches are quite different and, in the case of small business, not appropriate.

Conclusion

The district has considered, but not implemented, mechanisms to mitigate the inherent conflict in enforcement of small business operations. There have been no inspections by independent C&E staff or by the region.

It is not appropriate for small business inspectors to perform C&E for activities for which they have supervisory responsibilities.

Inspection Documentation

The audit assessed whether documentation of inspections is clear and sufficient, including conclusions about compliance or non-compliance and any follow-up action required.

The audit identified deficiencies with the documentation of the inspections carried out, specific examinations made and the results of those examinations.

For most inspections, the specific features examined and the method of examination by the forest official were not documented. Inspection documentation was often limited to observations such as "operations look good" or "operations are progressing well."

For inspections of small business activities, inspectors do not document whether the practices are in compliance with the Code. Instead, inspection forms refer only to compliance with the contractual obligations of the operator.

Conclusion

Documentation of inspection results is not sufficient. Details of the specific method and location of examinations made are not recorded. For inspections of small business activities, documentation of inspections still focuses on compliance with the contractual obligations of the forest operator rather than compliance with the Code.

The Ministry of Forests has recognized the above weaknesses and, prior to the period of our audit, was developing updated standards of documentation, which include the recording of the area/location examined, method of inspection and follow-up action required.

Fire prevention

In the district during fire season, licensees report their fire tool inventories on active sites and conduct their own inspections of fire preparedness, and report these to the district. MOF policy requires the district to inspect fire tools in a sample of sites.

We found that while the district maintained close scrutiny of the fire tool inventory information reported, it did not monitor the completeness of the self-reported inspection information, and does not have a system in place to ensure sufficient district spot checks are performed, as is necessary under a licensee self-reporting system.

We also observed a weakness in the conduct of one fire tool inspection. The forest official noted that a piece of machinery had been burned and that the licensee did not have the required fire tool equipment on site during a period of high fire hazard. The forest official advised the licensee to have the required fire tools on site by the next day. However, no contravention was recorded, and no follow-up inspections of the fire tools were conducted despite high fire hazard ratings. In our view, this is not appropriate enforcement.

Conclusion

While the district adequately monitored the fire tool inventory information reported, it did not monitor the completeness of the information licensees submitted about their own inspections. The district also does not have a system in place to ensure sufficient district spot checks are performed.

Range

The examinations conducted in the audits of range operations were quite comprehensive, results were publicly advertised as part of the range use plan public review requirements, and follow-up mechanisms were in place. About 20 of 80 range tenures were audited in a two-year period, as well as about 80 inspections pursuant to range use planning issues and complaints.

However, because the audits and subsequent follow-up only address about 20 percent of range operations each year, a large area of range tenures in the district was not inspected, except for specific sites inspected pursuant to public complaints.

MOF has not developed a corporate approach to compliance and enforcement for range activities. District audits and other monitoring activities were conducted by range program staff without the involvement of independent C&E practitioners. This weakness is mitigated by periodic regional monitoring, but this did not include independent field examination.

Conclusion

The range audits conducted were quite comprehensive, and results were followed up appropriately. However, compliance activity was conducted by range program staff without the involvement of the C&E function.

Field verification of plans

The audit found that there is limited field verification of approved site-specific operational plans. While the focus of C&E inspections is predominantly, and appropriately, on the results of forest practices, there remains a need for a sufficient level of plan verification to ensure that licensees understand and appropriately interpret the requirements of the Code and any higher level plans.

For example, the audit identified situations where fish streams were located outside cutblock boundaries, but with reserve zones that were directly adjacent to the boundary. In these situations, inspections focused on determining adherence to the approved boundary. Our concern is that there was no field verification that the streams were classified correctly, with the appropriate reserve zone prescribed. Had the streams not been classified correctly, adhering to the approved boundary may have been in contravention of the Code. There is therefore a need for some level of detailed validation in the field of approved operational plans.

Conclusion

The district is not adequately verifying in the field the accuracy of key features in approved operational plans.

Ministry of Environment, Lands & Parks

MELP does not have a program of periodic field inspections. In the absence of periodic inspections, the ministry relies on referrals from MOF and complaints from the public to identify potential contraventions.

The audit confirmed that, in certain situations, MOF communicates potential contraventions to MELP, mostly when there is a contravention relating to water, fish and wildlife values. However, the audit also identified situations where potential contraventions of an environmental nature, such as not retaining prescribed numbers of wildlife trees, were not identified by MOF and therefore not brought to MELP's attention.

Section 4.7 of this report provides further analysis of MELP's approach to Code C&E.

Conclusion

The current approach to C&E does not provide assurance that MELP is sufficiently informed about Code compliance for its area of responsibility.

4.4 Criterion: Investigations and determinations are carried out in all applicable situations and only when warranted. They are performed in a fair, objective and reasonable way, and are accurately recorded and reported.

Investigations are the primary tool for an in-depth examination pursuant to the identification of a suspected or alleged contravention of the Code. In many cases, the investigations will result from completion of an inspection, but they also can be initiated through other means, such as public complaints. The audit assessed whether investigations, and any subsequent determinations, are carried out in all applicable situations, conducted in a fair, objective and reasonable way, and are accurately recorded and reported.

Ministry of Forests

For those potential contraventions that were investigated, the investigations were warranted, carried out with reasonable efficiency and well documented. Determinations followed established processes, were adequately researched in accordance with the requirements of the Code, were well reasoned and documented, and were generally completed within reasonable time frames. We did not identify investigations or determinations that were unfair or inequitable.

For those potential contraventions involving water or fish and wildlife habitat, the district ensured that MELP was involved in the investigation.

We did identify two instances in which we were concerned with the timeliness of investigations, and note that MOF does not have a standard or guideline for the timeliness of investigations and determinations.

The audit identified several situations that may have warranted formal investigation, but the inspector did not assess that a potential contravention had occurred, in some cases because no significant environmental impact had occurred. In some cases, the deficiencies in inspections, described in the conduct of inspections section, precluded the auditors from assessing whether investigations were carried out in all applicable situations.

Ministry of Environment, Lands and Parks

MELP was appropriately involved in those investigations of potential contraventions of the Code related to water and fish and wildlife habitat during the audit period.

Conclusions

Those investigations and determinations conducted were warranted, performed in a fair, objective and reasonable way, were accurately recorded and reported, and generally completed within a reasonable time period.

We were unable to determine whether investigations are conducted in all applicable situations. The audit identified some potential contraventions that warranted further investigation.

MOF does not have a standard or guideline for the timeliness of investigations and determinations.

4.5 Criterion: Agencies establish, through operational plan approval and related processes, expectations for forest practices which are enforceable and in accordance with the Code.

Through operational plan approvals and related processes, district managers and designated environment officials establish rules and expectations for licensee performance which can have a major influence on licensee behaviour. It is important that such expectations are correctly established in accordance with the Code.

The audit assessed whether prescriptions and provisions in approved operational plans (forest development plans and silviculture prescriptions) are clear, unambiguous, enforceable and in accordance with the significant requirements of the Code.

A key component of the Code, and an important basis for enforcement, is the development of higher level (land use) plans and objectives. By setting objectives for forest resources in an area, higher level plans guide licensees' operational planning under the Code. These approved operational plans in turn form an important base against which government enforces.

The Board's 1999 report on government's framework for enforcement identified that the implementation of these higher level plans and objectives had been delayed, therefore hampering government's ability to enforce the Code to its originally intended level.

This audit found that, several years prior to the Code, parties in the Vernon Forest District had developed and introduced the *Okanagan Timber Harvesting Guidelines*, setting standards and expectations for many of the forest resources that are intended to be addressed by higher level plans. The district continued the application of the guidelines in the absence of higher level plans during the implementation of the Code. We feel that this played a significant positive role in the forest management standards achieved in the area.

We did, however, identify a number of prescriptions with provisions that are not enforceable, and others that create an enforcement issue by being overly prescriptive. These include a lack of specificity in the location of trails, specifying an exact number of wildlife trees to be left standing in a cutblock, and ambiguity in seasonal operating constraints and rehabilitation requirements.

Conclusions

The district is generally establishing clear and enforceable plans for forest practices. A few of the plans had provisions which are not enforceable or are overly prescriptive.

The *Okanagan Timber Harvesting Guidelines* were a proactive and useful method of identifying key forest resources and guiding operational planning in the absence of higher level plans under the Code.

4.6 Criterion: There are established organizational structures, policies and processes that contribute to and support appropriate enforcement of the Code.

Effective organizational structure, policy, management direction and oversight are necessary in order for government agencies to appropriately enforce the Code. The audit assessed whether the organizational model adopted by the agencies supports the effective enforcement of the Code; whether sufficient policy direction exists to guide and support agencies' C&E programs; whether clear and reasonable expectations are set for the operation of the C&E function; and whether the activities of the agencies are adequately monitored and supervised.

In the next section we discuss the coordination and inter-relationships between the agencies. In this section we assess each agency's organizational systems.

Ministry of Forests

Organizational structure

MOF has an established C&E program responsible for assessing compliance with the Code and, where necessary, enforcing the Code. Corporate, regional and district resources have been identified and assigned accordingly. We found that the district organizational model follows

traditional lines. The district C&E function inspects major licensee harvesting and road activity, but has limited involvement in small business, woodlots, silviculture and range.

As discussed in section 4.3, we have serious concerns with compliance and enforcement of activities in the Small Business Forest Enterprise Program. Small business activities are not inspected by the C&E function. Instead, small business staff responsible for supervising projects are also expected to perform C&E on their own work. In our view, this leaves small business inspectors in a conflict of interest situation. In the Vernon Forest District, due to the presence of the Vernon Log Yard, through which the district sells raw logs directly to the public, there is a considerable level of harvesting activity carried out under 'harvest and haul' contracts to the district. This compounds our concerns. It is not appropriate for those who supervise projects to also be expected to determine whether they have made a contravention of the Code.

The ministry has provided some guidance on compensating controls. However, the guidance was issued as advice rather than direction, and did not adequately address the conflict. A regional procedure was also developed addressing potential contraventions relating to obligations of the district manager. It was also determined that district C&E officials would inspect some small business TSL holder activities and perform final inspections of district manager activities. However, none of these compensating controls were implemented.

For silviculture, woodlots and range, compliance inspections are conducted by program staff, who also have technical and administrative responsibilities in the programs. The district C&E function is involved primarily when requested to handle investigations. For woodlots and range, there may be reasons why the independent C&E model should not be applied. The tenure holders are usually individuals, and informal C&E may be more suitable, as well as being more compatible with the closer, extension- and education-oriented role played by ministry staff. The situation is similar for silviculture, for which compliance activities are conducted by program staff, and the district C&E function has limited involvement. MOF has not provided guidance as to an appropriate organization of C&E for these programs. If C&E is to be performed by program staff, there should be a periodic review of inspection frequency and results by the independent C&E function.

Policy and management direction

MOF has policy in place governing several key aspects of C&E, such as inspections and investigations. Procedural guidance also exists in various forms including executive memorandums, corporate bulletins and regional and district procedures.

However, policy and procedural guidance is outdated or missing in a few areas. We have in this report identified a number of such deficiencies:

- the use of an outdated risk assessment procedure for harvesting
- the absence of guidance on the design of compliance and enforcement approaches in the silviculture, woodlots and range programs

- insufficient guidance on the conduct of inspections and standards of compliance

Our findings are supported by a recent ministry survey that found that C&E staff believe they are fairly consistent in their use of judgement and discretion but that there are few compliance standards to measure them by.

Technician training and direction has not been sufficient considering the responsibilities of forest officials under the Code. We observed that there has been some training on compliance matters, but training has focused more on law and post-inspection matters. There has been limited training related to the conduct of inspections, or various levels of non-compliance.

Monitoring and supervision

We assessed the specific processes applied by the district to monitor and measure attainment of compliance and enforcement objectives and targets, including ensuring consistency among forest officials and operational programs.

We found that the information used by managers and supervisors is not sufficient to adequately monitor and measure performance. Periodic field audits are conducted in the district, but these are not sufficient to achieve consistency in C&E activities. Management reports are limited to the number of inspections performed and the number of contraventions recorded. There is little information respecting other aspects of appropriate enforcement, such as the timeliness or completeness of inspections, inspection coverage by risk category, the reasonable application of professional judgement (i.e. effective and consistent decision-making), or the rate of non-compliance by type, operator or risk category.

This is a significant weakness in the district's C&E program, which relies heavily on the application of professional judgement and discretion by forest officials. The district indicated that this level of supervision is not necessary because forest officials are trained in the application of professional judgement. In our view, the level of training and direction provided to forest officials is not sufficient to justify limited supervision.

Ministry of Environment, Lands and Parks

MELP has not established a program specifically responsible for compliance and enforcement of the Code. MELP forest ecosystem specialists provide input into Code planning processes and conservation officers will assist, when requested, with formal investigations being carried out by the district.

MELP's current involvement in Code compliance and enforcement limits the need for formal management systems.

Conclusions

MOF has established an organizational model, but its policy framework supporting appropriate enforcement of the Code is incomplete.

District management has not recognized the inherent conflict of interest of the district in enforcing the small business activities for which it is also responsible for performing, and sufficient compensating controls have not been applied.

MOF has not yet designed an organization model and approach that ensures independence in the conduct of compliance and enforcement in the silviculture, woodlots and range programs.

Monitoring and supervision of forest officials' inspection activities in the district is not adequate. This is a significant weakness in the district's compliance and enforcement program.

MELP has not established a program with specific responsibility for compliance and enforcement of the Code.

The Ministry of Forests' new compliance procedures manual provides considerable guidance on risk management, performing inspections and addressing non-compliance for all programs, and a reporting module is planned.

4.7 Criterion: The decisions and actions of different parts of government responsible for enforcement of the Code are appropriate and coordinated.

Interaction at the local offices by agencies responsible for enforcing the Code is necessary to ensure that no significant gaps in enforcement arise. The audit assessed whether:

- respective roles, responsibilities and interactions are defined, agreed and documented
- communication and referral within and between agencies takes place and is coordinated and effective
- there are no significant gaps in enforcement or duplication of agency effort

A Memorandum of Understanding and a Local Area Agreement setting out agency roles and responsibilities were entered into by the three ministries responsible for Code enforcement. The agreements establish investigative roles: MOF takes the lead for Code investigative matters, and the MELP conservation officers address other matters (water, fish and wildlife) under other legislation. For those investigations conducted, we observed that MELP was consulted by MOF.

MELP's involvement in compliance matters is through the forest ecosystem specialist at the operational planning stage. The involvement is primarily through round table meetings and field visits conducted with licensees prior to the submission of forest development plans for approval. There is no MELP post-harvest inspection program, and post-harvest field presence is limited to occasional joint inspections at the request of MOF. While we observed that there was adequate referral by MOF of identified non-compliance to MELP officials, reporting to the FES of the results of MOF inspection activities is limited to occasional informal discussion.

As a result, while the FES provides input into operational plans, the FES does not receive sufficient information about the appropriateness of operational plans and whether forest practices are in compliance with the plans.

Under this approach, MELP senior officials are not attempting to use their C&E authorities under the Code, and the ministry has substantially removed itself from Code enforcement. While this approach does not appear to be that intended by legislation, it is more efficient and is workable provided that MOF inspections are addressing MELP's needs.

We found that MELP does not receive sufficient information about the appropriateness of operational plans and whether forest practices are in compliance with the Code. With respect to fish and wildlife habitat, this represents a serious gap in MELP's responsibilities.

We were informed that MELP plans to initiate a program of inspections addressing the achievement of objectives of site plans. Such a program has the potential to provide further information about Code compliance.

With respect to range practices, MELP periodically conducts water quality testing upstream from water intakes, and frequently receives the results of tests from the water purveyors in community watersheds. This activity is not conducted under the Code. However, section 7 of the *Range Practices Regulation* anticipates that MELP establish water quality objectives, involving research and creation of standards of water quality for each stream affecting a community watershed. To date, there have been no water quality objectives established for streams in the area of the Vernon Forest District, and so we were unable to assess the appropriateness of MELP's enforcement of water quality.

There were no activities requiring interaction with the Ministry of Energy and Mines. Current mining activity did not involve timber removal.

Conclusions

The defined roles and interaction between MOF and MELP related to investigations is efficient and working adequately.

MELP does not receive sufficient information about the appropriateness of operational plans and whether forest practices are in compliance with the Code. With respect to fish and wildlife habitat, this represents a serious gap in MELP's responsibilities.

We were unable to assess the appropriateness of the enforcement of water quality by MELP because the water quality objectives (and standards) anticipated by the Code have not yet been established.

4.8 Criterion: Reporting systems provide adequate information on agency performance in relation to enforcement objectives.

In order to ensure the effectiveness of C&E, agencies need to be able to judge their performance by establishing objectives and intended outcomes, and then measuring performance through the use of performance indicators and reliable reporting systems. The audit assessed whether objectives for enforcement are established and consistent with government direction; and measurable targets or performance indicators are in place and used to evaluate performance in relation to strategic objectives.

The Forest Practices Board's 1999 report on government's framework for Code enforcement identified that the ministries had not designed a framework for measuring performance of their C&E programs and that, in the absence of specific objectives for the programs, no meaningful data was available to assess the effectiveness of Code enforcement.

We recognize that performance measurement is complex for the business of C&E. However, our audit identified that there has been no improvement in this situation. While there are the broad goals of promoting compliance and enforcing fairly in accordance with standards, these have not been clearly delineated or documented, or further translated into strategies and plans.

The measures used are also not sufficient to guide and assess performance. Although business planning processes are applied, goals for compliance and enforcement continue to be limited to a target number of inspections, and the only indicators of results are the number of inspections and contraventions.

Conclusion

Sufficient performance measures have not been developed to guide and measure the performance of C&E activities. Reporting systems are limited to the ministry's traditional reporting of the number of inspections and contraventions.

Under the Ministry of Forests' new compliance procedures, district inspection plans will contain goals for C&E in all business areas, and the new system will provide for reporting performance in relation to those goals.

Audit of Government's Enforcement of the Forest Practices Code in the Vernon Forest District